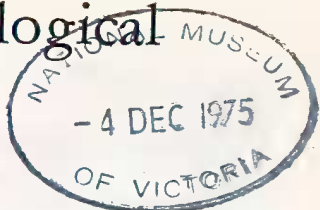


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MOTHS OF THE FAMILIES SPHINGIDAE, NOTODONTIDAE AND AGARISTIDAE OBSERVED IN KU-RING-GAI CHASE NATIONAL PARK, N.S.W.

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Introduction

Ku-ring-gai Chase National Park is situated to the north of Sydney and comprises some 36,000 acres of heath and dry sclerophyll forest interspersed with small remnant rainforest gullies on Hawkesbury sandstone.

In this list 12 Sphingidae, 16 Notodontidae and 6 Agaristidae are recorded and no doubt further observations, particularly on the northern and eastern boundaries, will reveal more species.

These observations have been made between 1st June, 1966 and 1st June, 1974. Moths attracted to the lights at Bobbin Head picnic area and at the Park Headquarters, together with those at a mercury vapour lamp situated on the southern boundary, provided most records but these were supplemented by larvae and imagines from sites throughout the area. An m.v. lamp used with sheets in cold conditions on the nights of 25th and 26th November, 1972 by Mr V. J. Robinson and the author in the middle of the area produced 207 species of moths including 3 species of Sphingidae and 10 Notodontidae. All the species taken in these two families had been recorded before.

It is interesting to note that the summer of 1970-71 was exceptionally favourable for the appearance of northern butterfly species in Sydney (Rose 1972), and this was apparently so for Sphingidae. *Acosmeryx anceus*, first seen in October 1970, was particularly abundant later that summer, as was *Coequosa triangularis*, *Metaminas australasiae*, *Hippotion celerio* and *Agrilus convolvuli*, whereas only odd ones were noted in previous years. In November 1971 the single specimens of *Nephele subvaria* and *Theretra queenslandi* came to light, in very good condition as if they had bred locally.

I list species under family and subfamily where applicable, followed by months in which imagines were observed and remarks, unless otherwise stated, larvae were reared to the imago on the food plants upon which they were found.

Systematic List

SPHINGIDAE

Acherontiinae

Psilogramma menephron menephron (Cramer). October to April; common every year. Larvae found on Snapdragon *Antirrhinum majus*, pupated 24th January 1970, emerged February 1970; on Jasmine *Jasminum humile*, pupated December, died as pupa; on Privet *Ligustrum sinense*, emerged in April, and another pupated in April and died as pupa; on Lilac *Syringa philadelphus*, pupated January, emerged February, and larvae also found on Lilac in April and May; on Grapevine *Vitis vinifera*, pupated 1st January, emerged 9th February. A pupa found in the soil in June emerged in October.

Agrius convolvuli (Linnaeus). October to March; common since 1971, odd ones before.

Ambulicinae

Coequosa triangularis (Donovan). January to April; common some years. Larvae found on the ground, pupated November 1970, emerged 7th February 1971, and another pupated 13th December 1970, emerged January 1971; female found newly emerged 22nd March, deposited spheroid green eggs 2mm diameter, hair scales attached, hatched 9th April, larvae given *Persoonia levis* leaves which they did not eat and died. Four adults were tagged at m.v. lamp in February 1971, but were not seen again.

Metamimas australasiae (Donovan). November, February to March; not as common as *Coequosa triangularis*. A larva similar to that of *C. triangularis*, but with a little orange colour and side stripes more pronounced was found on the ground under *Banksia ericifolia*, pupated 13th December 1970, emerged 6th February 1971.

Philampelinae

Cizara ardeniae (Lewin). February, March, October, December; not common, one specimen only in each of these months.

Nephele subvaria (Walker). One specimen only came to light 21st November 1971.

Acosmeryx anceus anceus (Stoll). October to March, June; common at times. Reddish larva found on ornamental grapevine *Vitis* sp., pupated 4th April 1973, emerged June 1973.

Choerocampinae

Hippotion scrofa (Boisduval). October to April; very common.

Hippotion celerio (Linnaeus). September to February; reasonably common. Larvae on Grapevine *Vitis vinifera*, pupated 2nd February, emerged 20th February; on Arum Lily *Alocasia macrorrhizos* emerged December.

Theretra oldenlandiae firmata (Walker). October to April; common. Larvae found on *Fuchsia boliviana*, pupated 1st January 1969, emerged 26th January 1969, and another pupated 6th January, emerged February (pupa on soil with leaves webbed together as top cover); another on *Fuchsia* pupated April, emerged October or November; on Grapevine *Vitis vinifera*, pupated 19th December, emerged February.

Theretra latreillei latreillei (Macleay). November to March; fairly common.

Theretra queenslandi (Lucas). One specimen only came to light 26th November 1971.

NOTODONTIDAE

Notodontinae

Hylaeora eucalypti Doubleday. April, May; common.

Hylaeora capucina Felder. November to January, May to July; very common every year.

Neola semiaurata Walker. October to May; common. Larvae found on *Albizia lophantha* March, pupated 4th April 1970, emerged 17th March 1971; another pupated April, ichneumon emerged October; on *Acacia elata*, died of what appeared to be a virus; on *Acacia prominens*, pupated March, died as pupa. Eggs white, 1.5mm diameter, round with flat base; deposited on *Dodonaea cuneata* October 1973, larvae reared on same, but died of what appeared to be a virus, one within cocoon 26th March 1974 died as larva.

Danima banksiae (Lewin). November to February, May to July; common. Larvae on *Grevillea punicea*, pupated 2nd February, emerged 29th May; on *Grevillea sericea*, pupated February, emerged May, and deposited 85 eggs, white, smooth, round with flat base, covered in hair scales, 2mm diameter, in 2 scattered groups and odd ones; on *Banksia aspleniifolia*, pupated 4th April 1970, ichneumon emerged 7th October 1970. A female found in January deposited eggs.

Sorana bicolor Walker. October to January, May to July; common.

Destolmia lineata Walker. August to January; common.

Cascera muscosa Walker. May, June, October, November; not common; hemispherical white eggs, 1.3mm diameter, deposited 5th June.

Gallaba eugraphes Turner. October, January, April; not common.

Thaumetopoeinae

Aglasoma variegatum (Walker). January to March; fairly common. Larva found on dead palm frond, would not feed on palm fronds, pupated October, emerged following February. Two larvae found on *Banksia ericifolia*, pupated October. A further larva found on the ground in August ate *Banksia aspleniifolia*, *B. marginata* and *B. ericifolia*.

Teara contraria Walker. April, October, November; common.

Marane melanospila (Wallengren). October to June; common. Hairy, grey and black larva eating flowers of *Leptospermum attenuatum*, pupated 7th October 1969, emerged 30th October 1969. Captured imago deposited eggs in March, white, round with flat base, covered in hair scales, 0.8mm diameter.

Epicoma tristis (Lewin). September to May; very common.

Trichiocercus sparshalli (Curtis). October to January, May to July; common. Imago emerged 16th November, within 24 hours deposited eggs, pale green, hemispherical, 1.1mm diameter.

Discophlebia catocalina Felder. November, January; only two specimens.
Discophlebia lucasi Rosenstock. January, March; only two specimens.
Discophlebia sp. December to April; quite common but species cannot be named.

AGARISTIDAE

Agarista agricola (Donovan). September to April; fairly common. Larva found on ground under *Cayratia clematidea* in March was preserved (has been bred on this plant by Mr V. J. Robinson (pers. comm.).

Phalaenoides glycine Lewin. September to April, July; very common. Larvae found on *Hibbertia scandens*, pupated 16th November, emerged 12th December; on *Fuchsia boliviana*, pupated April, emerged October. An imago deposited eggs on *Dombeya natalensis* 14th February, hatched 2nd March, but failed to survive.

Phalaenoides tristifica (Hübner). October, November; common.

Cruria synopla Turner. November to March; fairly common.

Hecatesia fenestrata Boisduval. August to December, March, April; males common at dusk (6 in 100 sq. metres one evening); one female came to light, another was observed feeding at blossoms at noon one sunny day.

Ipanica cornigera (Butler). One specimen came to light 10th March 1973. Dr I. F. B. Common (pers. comm.) says this species has "a very wide distribution in Australia, but especially inland".

Idalima tetrapleura (Meyrick). November; one specimen found just north of the Hawkesbury River, 3km north of the Park boundary.

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